Applicant: Thomas F. Smith et al. Attorney's Docket No.: 07039-246001

Serial No.: 10/066,432 Filed: January 31, 2002

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## In the Specification:

samples.

Please amend the paragraph on page 21, lines 4-18 as follows:

Conventional PCR methods utilizing FRET technology can be used to practice the methods of the invention. In one embodiment, a LightCycler<sup>TM</sup> instrument is used. A detailed description of the LightCycler<sup>TM</sup> System and real-time and on-line monitoring of PCR can be found at biochem.roche.com/lightcycler on the World Wide Web <a href="http://biochem.roche.com/lightcycler">http://biochem.roche.com/lightcycler</a> The following patent applications describe real-time PCR as used in the LightCycler<sup>TM</sup> technology: WO 97/46707, WO 97/46714 and WO 97/46712. The LightCycler<sup>TM</sup> instrument is a rapid thermal cycler combined with a microvolume fluorometer utilizing high quality optics. This rapid thermocycling technique uses glass cuvettes as reaction vessels. Heating and cooling of the reaction chamber are controlled by alternating heated and ambient air. Due to the low mass of air and the high ratio of surface area to volume of the cuvettes, very rapid temperature exchange rates can be achieved within the LightCycler<sup>TM</sup> thermal chamber. Addition of selected fluorescent dyes to the reaction components allows the PCR to be monitored in real-time and on-line. Furthermore, the cuvettes serve as optical elements for signal collection (similar to glass fiber optics), concentrating the signal at the tip of each cuvette. The effect is efficient illumination and fluorescent monitoring of microvolume

Please amend the paragraph bridging pages 22 and 23 as follows:

Another FRET technology format utilizes TaqMan® technology to detect the presence or absence of an amplification product, and hence, the presence or absence of HSV. TaqMan® technology utilizes one single-stranded hybridization probe labeled with two fluorescent moieties. When a first fluorescent moiety is excited with light of a suitable wavelength, the absorbed energy is transferred to a second fluorescent moiety according to the principles of FRET. The second fluorescent moiety is generally a quencher molecule. During the annealing step of the PCR reaction, the labeled hybridization probe binds to the target DNA (*i.e.*, the amplification product) and is degraded by the 5' to 3' exonuclease activity of the Taq Polymerase during the subsequent elongation phase. As a result, the excited fluorescent moiety and the quencher moiety become spatially separated from one another. As a consequence, upon

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excitation of the first fluorescent moiety in the absence of the quencher, the fluorescence emission from the first fluorescent moiety can be detected. By way of example, an ABI PRISM® 7700 Sequence Detection System (Applied Biosystems, Foster City, CA) uses TaqMan® technology, and is suitable for performing the methods described herein for detecting HSV. Information on PCR amplification and detection using an ABI PRISM® 770 system can be found at appliedbiosystems.com/products on the World Wide Web http://www.appliedbiosystems.com/products.